

*REMARKS*

Claim 1 has been amended to specify the unnatural aromatic amino acid, the unnatural hydroxy containing amino acid and the unnatural basic amino acid. Support of this amendment can be found at page 21, line 30 - page 22, line 4. Claim 2 has been amended to insert the sequence identifier for the peptide of general formula I, to clarify that Xaa<sub>3</sub> is with respect to the peptide of SEQ ID NO:5, to clarify that the derivative is a derivative of the peptide of SEQ ID NO:5 and to specify that the derivative is an amino acid substitution with the specified substitutions. Support for these amendments can be found at page 7, lines 21-32, page 21, line 30 - page 22, line 4, and page 23, lines 1-4. Claims 1, 2, 8, 9 and 39 have been amended to recite an isolated peptide rather than a substantially pure peptide. In view of the amendments to claim 2, claims 40 and 41 have been canceled.

It is submitted that these amendments do not constitute new matter, and their entry is requested.

The Examiner objected to claim 2 for an informality. It is submitted that the amendment of claim 2 obviates this objection.

The Examiner rejected claims 2, 9 and 40-41 under 35 U.S.C. §112, first paragraph for lack of enablement. The Examiner contends that the specification is enabling for derivatives of SEQ ID NO:5 wherein a single amino acid is replaced but not for substitutions at multiple sites. Claim 2 has been amended to specify that the derivative is "an amino acid substitution of the peptide of SEQ ID NO:5" in which the amino acid substitution is specified. Claims 40 and 41 have been canceled. It is submitted that these amendments obviate this rejection, and its withdrawal is requested.

The Examiner rejected claims 2, 9 and 40-41 under 35 U.S.C. §112, second paragraph for being indefinite. Claim 2 has been amended to specify that the derivative is a derivative of the peptide of SEQ ID NO:5 and that the Xaa<sub>3</sub> refers to the peptide of SEQ ID NO:5. Claims 40 and 41 have been canceled. It is submitted that these amendments obviate this rejection, and its withdrawal is requested.

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The Examiner rejected claim 2 under 35 U.S.C. §102(b) as being anticipated by Blom et al. (*Nucl Acids Res* 26:1205-1213, 1998). In this rejection, the Examiner refers to an amino acid sequence in Figure 6a. However, Figure 6a is a nucleic acid sequence, whereas Figure 6b is a protein sequence. It appears that the sequence specified by the Examiner is at amino acid residues 508-518. Although this protein sequence contains the peptide sequence specified by Examiner, it does not describe an isolated peptide of the sequence set forth in claim 2, i.e., Xaa<sub>3</sub> is not Tyr. Furthermore, it is submitted that the amendment of claim 2 to specify the nature of the derivative obviates this rejection. Withdrawal of this rejection is requested.

In view of the above remarks and amendments to the claims, it is submitted that all of the present claims satisfy the provisions of the patent statutes. Reconsideration of this application and early notice of allowance are requested. The Examiner is invited to telephone the undersigned to expedite allowance of this application.

Respectfully submitted,

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